MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH
Division of Tuberculosis Prevention and Control

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POLICY: Tuberculosis Testing and Treatment for Nursing Homes and Rest Homes

Date: July, 2001

I. Employees:

Tuberculin skin tests (TSTs), follow-up medical evaluations, and chest x-rays for health care employees are according to federal Occupational Safety and Health Administration (OSHA) regulations. For current requirements, log-on to www.OSHA.gov. For inquiries call OSHA in Boston (617-565-9860) or the Massachusetts Division of Occupational Safety, On-Site Consultation Program (617-969-7177).

II. Residents - Expected Length of Stay is 3 months or longer:

Rationale: Many older persons, 65 years of age or more, were infected with *Mycobacterium tuberculosis* (TB) earlier in life when TB was more prevalent in the United States. This group constitutes a large repository of latent tuberculosis infection (LTBI) in the United States.

In Long-term care (LTC) facilities, where residents spend prolonged periods sharing the same air, the potential for TB transmission is high. Facilities need to establish baseline TST reactions for new residents. Subsequent TB skin testing of residents is only necessary as a response to known or suspected exposure to active TB.

A. Assessing and Skin Testing New Residents:

1. Skin test all new residents, expected to stay in the facility for three months, as soon as possible after admission, unless there is documentation of a previous positive reaction (10mm or greater).

2. The standard test method (Mantoux test) is an intradermal administration of 5 tuberculin units of purified protein derivative (PPD). Multiple-puncture devices (Tine Tests) are not acceptable.

3. A two-step TST procedure is required for the initial testing of residents in order to establish a reliable baseline. (See appended rationale and procedure for two-step testing.)

4. All TSTs are administered and read by an appropriately trained person and recorded in mm of induration in the resident's medical chart. Absence of induration is recorded as 0 mm.

5. All residents with reactions of 10 mm or greater, using the two-step method, must have a chest x-ray and medical evaluation. (See II-B below.)

6. Assess new residents for signs and symptoms of tuberculosis, such as a cough for three or more week's duration, unexplained weight loss, or unexplained fever. If signs/symptoms are present, promptly refer for a medical evaluation and chest x-ray.

7. Once active TB disease is ruled out, the resident is considered for treatment of latent TB infection (LTBI) according to current guidelines from the federal Centers for Disease Control and Prevention (CDC) and the American Thoracic Society (ATS). ("Targeted Testing and Treatment of Latent Tuberculosis Infection", MMWR, June 9, 2000, vol. 49, No. RR-6.) (See appended fact sheet entitled "Targeted Testing & Treatment for Latent TB Infection", and the appended booklet "Latent Tuberculosis Infection: A Guide for Massachusetts Providers".)

8. The resident's TST status should be prominently displayed in the medical record.

B. Medical Evaluations and Chest X-rays:

1. Any resident with a new positive TST must have a medical evaluation and an initial chest x-ray.

2. For residents with symptoms of TB, the medical evaluation includes 3 sputum specimens for acid fast smear and culture, taken 24 hours apart.

3. Evaluate residents with active tuberculosis disease, or LTBI, for risk or presence of HIV infection. Medical management of TB disease, or LTBI, may be altered in the presence of HIV.

4. Routine baseline chest x-rays on admission are no longer required or recommended.

5. Periodic chest x-rays of persons with a history of positive TSTs are not advised, and are not necessary unless the individual has signs and symptoms of tuberculosis disease.

C. Repeat skin testing only in the following circumstances:

1. An exposure to an active case of TB.

2. As a diagnostic tool when the resident is suspected of having active TB.

3. When the long-term care facility has evidence of ongoing TB transmission within the facility.

D. Skin-Test Conversions:
Residents exposed to an active case of TB who "convert" their skin test (defined as an increase of 10 mm, or greater within a two year period) are at high risk of developing active tuberculosis and should be evaluated and given treatment for LTBI, unless medically contraindicated.

E. Monitoring Treatment:
Licensed staff, trained to monitor for signs and symptoms of drug toxicity, should administer treatment for LTBI according to current guidelines from CDC/ATS.

III. Screening Short-Term Residents – Expected Length of Stay is less than 3 months:

Residents admitted to long-term care facilities for short-term rehabilitation, or family respite, do not need to be skin tested, x-rayed, or evaluated for TB unless they exhibit signs and symptoms of TB.